REMARKS/ARGUMENTS

Favorable consideration of this application, as presently amended and in light of the following discussion, is respectfully requested.

Claims 1-13 are presently pending in this application, Claims 5-13 having been withdrawn from further consideration by the Examiner, and Claim 1 having been amended by the present amendment.

In the Office Action dated Feb. 13, 2003, the specification was objected under 35 U.S.C. §112, first paragraph, as failing to provide an adequate description; Claims 1-4 were rejected under 35 U.S.C. §112, first paragraph, as containing subject matter not enabling to one skilled in the relevant art; Claims 1-4 were rejected under 35 U.S.C. §112, second paragraph, as being incomplete for omitting essential elements; Claims 1-4 were rejected under 35 U.S.C. §112, second paragraph, for being indefinite; Claims 1-3 were rejected under 35 U.S.C. §103(a) as being unpatentable over either one of Nagase et al. (U.S. Patent 4,894,202, hereinafter "Nagase et al. '202") or Nishino et al. (U.S. Patent 4,927,598) in view of Nagase et al. (U.S. Patent 5,398,269, hereinafter "Nagase et al. '269") and Carter (U.S. Patent 4,526,626); and Claim 4 was rejected under 35 U.S.C. §103(a) as being unpatentable over either one of Nagase et al. '202-Nagase et al. '269 – Carter combination or Nishino et al.- Nagase et al. '269 – Carter combination, and further in view of either one of Honda et al. (U.S. Patent 4,828,790) or Midorikawa et al. (U.S. Patent 5,995,576).

Applicants filed a complete response to the Feb. 13, 2003 Official Action on July 14, 2003, and received an Advisory Action dated July 22, 2003 indicating that the Amendment filed July 14, 2003 raised new issues and a new matter issue, and would not be entered because the application was under final rejection. In response, Applicants have now filed RCE papers requesting entry of the Amendment filed July 14, 2003 and the present amendment addressing the "new matter" issue raised in the Advisory Action. To that end,

the phrase, "any one of," has been re-introduced into Claim 1 as stated in the original Claim 1. Accordingly, it is respectfully submitted that no new matter issue exists.

In response to the several outstanding grounds for rejection, Applicants refer to the Amendment filed July 14, 2003 and incorporate the arguments therein presented into the present amendment.

To assist in an understanding of the claimed invention, Applicants further direct attention to an aspect of Applicants' invention which Applicants believe has not been given sufficient consideration in the prior patentability analysis. To that end, Applicants point out that according to the present invention:

(i) the amount of iron carried into the nuclear reactor and corrosively eluted from the structural material within nuclear reactor into reactor water is made to be at least twice as much as the total amount of nickel carried into the nuclear reactor and the amount of nickel generated in the nuclear reactor, and

(ii) an upper limit of concentration value of iron in system water supplied into the nuclear reactor is limited to up to 0.10 ppb (Claim 1), or up to 0.04 ppb (Claim 2).

As described in the original specification, when the amount of iron carried from the supply water system 1 into the nuclear reactor 2 is up to 0.10 ppb (case of Claim 1), in order to satisfy the requirement that the total amount of iron generated is made at least twice as much as the total amount of nickel generated, the requirement can be achieved by only reducing and limiting the amount of nickel carried from the supply water system 1 into the nuclear reactor 2 to up to 1/4.4.[1]

While, when the amount of iron carried from the supply water system 1 into the nuclear reactor 2 is up to 0.04 ppb (case of Claim 2), the requirement ($Fe/Ni \geq 2$) can be achieved by reducing and limiting the amount of nickel generated from the fuel springs up to

[1] Specification, page 15, third paragraph.

½ and by reducing and limiting the amount of nickel carried from the supply water system 1 into the nuclear reactor 2 to up to 1/4.4.

To further assist in the above explanation, attached hereto is a schematic illustration of the above relationship. This relationship is not believed to be disclosed or obviated by the art of record. Accordingly, it is believed that Claims 1-4 define patentable subject matter.

Consequently, Applicants respectfully submit that the present application is in condition for allowance, and an early action favorable to that effect is earnestly solicited.

Respectfully submitted,

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